



6.0 FEASIBILITY OF MERGER

6.1 Water System of Town of Beaufort

The Town of Beaufort provides water and sewer services to its residents through established water rates that covers existing financial debts and other operational costs pertaining to these enterprise funds. The Town purchases water from the County for distribution in Eastman Creek subdivision. Currently the Town provides limited sewer service to approximately 200 customers located within County's SWTD with water purchased from the District at its existing rate. The Town has sewer force mains along NC Highway 70 serving sewer needs to East Carteret High School, also extending along NC Highway 101 serving sewer needs to Eastman's Creek and Jarrets Bay Industrial Park. This existing layout of the sewer force mains provides an opportunity to serve sewer needs within a large area of the County's SWTD which could offer an attractive condition to grow the customer base for the Town's sewer system.

Current water and sewer rate for an out-of-town customer is approximately double the rate of in-town customer. Acquiring the County's water system would increase the Town's customer base by approximately 34% with no cost for infrastructure. The potential opportunity to grow both water and sewer services within the County, at a lower rate will encourage businesses and developers to seriously consider annexation when planning growth within the merged service area.

6.2 Organizational Impact of Merger

Currently, the County's PWD has three personnel who are directly responsible for water operations. The organizational responsibilities of these people have been described in Chapter 3. If a merger is executed, one and possibly two of these employees could be transferred to Town's Public Utilities Department, which now has a total of four (4) full time employees. For the purpose of this report we will calculate the Town's additional personnel needs to support the merger at service provided by a full-time and a part-time employees. The County would transfer the remaining employee to another area of need with their other operations. Based on 2020 budget, salaries for the County's 3 water staff are approximately \$330,000, including benefits. The merger could provide an opportunity to save a



minimum of half (\$165,000) that expense. With other redundancies within the budgets, this number could very well be higher.

Water billing, collection and customer service support would be completely transferred from the County to the Town. As the Town is already managing its own billing, it is assumed that no additional employee is needed for billing the merged system.

6.3 Key Advantages of Merger for Town of Beaufort

There are several advantages for the Town to acquire the County's water distribution system. Some of the key benefits are listed below:

- ◆ The Town will acquire approximately \$12.3 million worth of infrastructure from the County.
- ◆ The Town will be able to operate the system largely with existing personnel plus 1.5 additional staff and equipment.
- ◆ The merged water systems would provide an opportunity not only for system growth but could also spur business and residential growth in the Town's tax base through potential annexations.
- ◆ With the merger, a new rate structure may be proposed to attract developers and business that are near the existing sewer force mains to consider annexation to avoid out-of-town rates.

6.4 Recommendation for Carteret County

As shown in Table 9, the water district system has an existing debt of \$2,066,128 (principal only) that will be fully retired by the year 2052. This debt poses a liability and concern for the Town if they acquire the County's water distribution system. For a successful merger of the two water distribution systems, the following are recommended measures for the County:

- ◆ The County would maintain the SWTD for a minimum of eleven (11) years until FY 2031. The debt service for FY 2020 is \$245,800 (adopted by the County Commissioner) which will be paid using the revenue generated from special water district funds. The County should pay this same debt service fee amount for the next eleven (11) years to retire the debt. Once this existing debt is retired, the County may no longer need to maintain this special water tax district and can either eliminate the tax altogether or modify it for future needs within the district for health and safety.
- ◆ If the County transfers ownership of its water systems to the Town and agrees to continue pay \$245,880 per fiscal year toward the debt, there will be a net balance of \$177,120 (Table 11; \$423,000-\$245,880) every year, in the special water district funds. The County may use



these remaining funds to participate in capital improvement upgrades and replacements of the existing infrastructure transferred to the Town. However, capital improvements directly benefiting the Town would be subject to negotiation.

- ◆ The County would maintain the right to request upgrades to the existing system within the SWTD boundaries with mutual understanding that the cost for such an upgrade will be paid by the County for a negotiated number of years. A potential negotiated period may include the next 11 years when the County would continue to collect the SWTD revenue to pay off the debt service. It is also expected that both the Town and the County will work together to accomplish these projects through a fair assessment of capital project benefits to each entity.

6.5 Recommendation for Rate Modification

Existing out-of-town rates (Appendix C) established by the Town are currently seven percent (7%) higher than rates charged by the County (Appendix B). In exchange for the County's commitment to transfer ownership of the system, participate in capital costs for a period of eleven (11) years and retire the existing debt, it is recommended that the Town adopts a readiness to serve charge for the SWTD that is the same as that for the out of town customers but keep the water use rate as that of in town customers, shown in Table 13.

Table 13. Proposed Out of Town Water Rates

Description	Amount (\$)
Readiness to Serve Charge ¹	\$20.74
Variable Rate for Water ²	\$5.07/1,000 gallons
Cost for 5,000 gallons ³	\$46.09

Notes:

1. Out of Town Readiness to Serve
2. Water Usage rate for in Town customers (Appendix c)
3. Cost = \$20.74 + (\$5.07*5) = \$46.09

This rate is a recommendation only that still keeps the water rate for the current County customers below their present water rate. For this report, only the rate for 3/4 inch meters was considered; the rates for other size meters serving customers within the water district boundary can be set using similar logic.



Accepting this water rate structure in addition to acquiring the County water system infrastructure, would not limit the Town's right to maintain another out-of-town rate for customers outside the County's current water district boundary.

6.6 Financial Advantages for Town

The proposed rate structure (for 3/4-inch meters) shown in Table 13 would save County customers an estimated \$9.01 per month compared to the existing county water rate of \$55.10 per month. Though the new rate structure would reduce water sales revenues generated from the County customers, the savings in operating expense through reductions in salaries (1.5 persons instead of 3 persons) and other redundant expenses needed for operation would more than compensate for any losses. As described in Section 6.2, the merger would save nearly \$165,000 per year in salaries and benefits. Considering that saving, water system revenues and expenses for before and after merger conditions are calculated and shown in Table 14.

Table 14. Comparison of Cash Flow - Before and After Merger

Year	Projected Special Water District Revenue (Before Merger) ¹	Projected Special Water District Revenue (After Merger) ²	Projected Water System Expense (Before Merger) ¹	Water System Expense (After Merger) ³
2020	\$725,786	\$606,757	\$718,340	\$553,340
2021	\$740,302	\$618,892	\$732,707	\$567,707
2022	\$755,108	\$631,270	\$747,361	\$582,361
2023	\$770,210	\$643,896	\$762,308	\$597,308
2024	\$785,614	\$656,773	\$777,554	\$612,554
2025	\$801,327	\$669,909	\$793,106	\$628,106
Total	\$4,578,346.51	\$3,871,471	\$3,827,121	\$3,3541,376

Notes:

1. From Table 12
2. 83.6% of Revenue (Before Merger); 83.6% is based on Current County rate of \$55.1 and proposed rate of \$46.09 as calculated in Table 13
3. Expense (Before Merger) minus savings in staff compensation (\$165,000)

Projected after-merger revenue and expense show positive cash flow for the County system that would be acquired by the Town. The higher out-of-town rate for the acquired system would encourage



customers and developers to strongly consider the option of annexation. The annexation would lead to lowering of utility rates and eventually increase tax base for the Town.

-- End of Section --



7.0 CONCLUSION

The merger of the two water systems will be beneficial for both the County and the Town. Acceptance of merger conditions would benefit the Town from acquiring \$12.3 million of water system assets. This would also lead to expansion of their customer base without the expenditure of major funds for years to come.

Acquiring the County's water system would require periodic upgrades and capital improvement investments, however, the capital associated with such an upgrade is not a concern due to the following reasons:

- ◆ Potential for growth in utility revenues and tax base.
- ◆ Recommended agreement for County participation in costs for a period of a minimum of eleven (11) years after transfer of the water distribution system for capital improvements to the existing system.
- ◆ County participation toward "county specific" upgrades and extensions within the district.

Considering the advantages and disadvantages of this potential merger, DAA recommends transfer of the County's water distribution system to the Town, for the sum of one dollar and other valuable considerations. The acceptance of the merger conditions by the Town will be based on refinement of these conditions and other concessions by both parties. All legal issues regarding such transfer will need to be addressed before the merger of the two water systems can be completed and executed.

-- End of Section --



8.0 REFERENCES

Blank Depreciation Worksheet Developed for City of Dogwood Depreciation Calculation Worksheet-Government Capital Assets.

Laurel Park / Hendersonville Water System Merger Feasibility Study, Town of Laurel Park, North Carolina, June 2017.

Jordan Lake Water Supply Storage Allocation Request, City of Raleigh and Merger Partners, January 13, 2015.



Appendix A
Carteret County Water System Maps

Figure 1

Carteret County's Water System

Figure 2
Merrimon Water System



**Appendix B
Carteret County Water Rates**

**Water Service
Fee Schedule
FY 2018-2019**

3/4" Meter

Basic Charge (No Usage) Flat Fee \$27.50 / mo. Covers 1st 1,000 gals.
Volume Charge \$6.90 per 1,000 gals

1" Meter

Basic Charge (No Usage) Flat Fee \$38.00 / mo. Covers 1st 1,000 gals.
Volume Charge \$6.90 per. 1,000 gals

2" Meter

Basic Charge (No Usage) Flat Fee \$110.00 / mo. Covers 1st 15,000 gals.
Volume Charge \$6.90 per 1,000 gals

4" Meter

Basic Charge (No Usage) Flat Fee \$340.00 / mo. Covers 1st 53,000 gals.
Volume Charge \$6.90 per 1,000 gals

Merrimon System (3/4" Meter)

Basic Charge (No Usage) Flat Fee \$16.00 / mo. Covers 1st 1,000 gals.
Volume Charge \$6.90 per 1,000 gals

Town of Beaufort (Eastman's Creek)

Basic Charge (No Usage) Flat Fee \$27.50 / mo. Covers 1st 1,000 gals.
Volume Charge \$6.90 per 1,000 gals

Fire Hydrant Usage

Hookup & Service Charge: \$75.00/Monthly
Mobilization to hydrant site and employee on site during tank fill.
\$200.00 Deposit
\$8.75 per 1,000 gallons.

Hydrant & Hydrant Meter Tampering \$250.00 1st offense
\$500.00 2nd offense (and Legal Action)

Damage Fee – Fire Hydrant \$2,500.00

Fire Line – Sprinkler Fee

Size	Monthly fee
2"	\$27.50
4"	\$32.50
6"	\$75.00
8"	\$105.00

Tap Fees

Meter Size	Tap Fee**
3/4 "	\$1,000.00
1"	\$1,150.00
2"	Cost + 10%
4"	Cost + 10 %

****Additional \$900.00 Tap Fee for any meter requiring road bore work**

Any meter 2 inch or larger will be engineered by Mc David & Associates and County will charge cost of materials and installation, engineering fees and additional 10%.

Security Deposits

Property Owner	\$100.00
Renter/Lease holder	\$200.00

Damage and Tampering Fees

Tampering Fee - Meters	\$100.00
2nd Offense (and Legal Action)	\$500.00
Damage Fee – Meters	\$135.00
Damage Fee – MXU Remote Unit	\$135.00

Other Fees

Non-Sufficient Check Fee	\$25.00
Bank Inspections	\$30.00
Late Charges	10% of balance
Service Fee*	\$30.00

*At the time of reconnection the deposit on account must be equal to the deposit amount required for new accounts as of that date.

*All accounts subject to disconnection that have not been paid by 5:00 pm on the day prior to disconnections will be charged the service fee.



Appendix C
Town of Beaufort Water Rates

Water & Sewer Rates & Fees

All water and sewer taps made outside Town limits are double in-town rates shown above. Water or sewer capacity fees outside Town limits are negotiable but will not exceed 2X rates shown above.

Upgrades in service, i.e., changing from a 3/4" meter to a 1" meter, are subject to a difference in the water tap, water capacity, and sewer capacity fees.

All taps larger than 2" shall be installed at developer's cost in accordance with Town of Beaufort standards and developers shall pay a tap-on fee as shown above.

► Tap & System Development Fees

TAP FEES			SYSTEM DEVELOPMENT FEES		
SIZE	WATER	SEWER	SIZE	WATER	SEWER
3/4"	\$ 700	\$ 750	3/4"	\$ 476	\$ 5,524
1"	800	750	1"	793	6,207
1 1/2"	1,075	750	1 1/2"	1,585	7,015
2"	1,375	750	2"	2,536	8,064
3"	575	750	3"	4,755	10,445
4"	625	750	4"	7,925	15,875
6"	850	750	6"	15,850	22,550
8"	1,175	750	8"	25,360	26,240

► **Water & Sewer Usage Rates**

WATER USAGE RATES

<u>TYPE</u>	<u>SIZE</u>	<u>IN TOWN</u>	<u>OUTSIDE</u>
<i>BASE</i>	¾"	\$ 10.37	\$ 20.74
	1"	17.32	37.33
	1 ½"	34.53	82.96
	2"	55.27	147.25
	3"	110.65	333.91
	4"	172.87	NA
	6"	345.63	1,327.36
<i>VARIABLE</i>	1000 gal	5.07	7.61

SEWER USAGE RATES

<u>TYPE</u>	<u>SIZE</u>	<u>IN TOWN</u>	<u>OUTSIDE</u>
<i>BASE</i>	¾"	\$ 21.17	\$ 42.34
	1"	35.85	70.01
	1 ½"	70.50	140.99
	2"	112.20	225.67
	3"	225.88	451.77
	4"	352.90	705.81
	6"	705.60	1,411.19
<i>VARIABLE</i>	1000 gal	16.80	33.60